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ABSTRACT

Intended for use by state library officials with policy responsibilities, this report presents a process for determining state levels of adequacy of public library services, measuring the current statewide performance, and planning statewide strategies for improving performance. Several facets of library service and resources are addressed, and criteria are delineated for various levels of service for communities of various sizes. A brief review of public library development in the United States and in Oklahoma focuses both on the role of public library standards and performance measurement, and on the role of state library agencies in fostering public library development. A discussion of statewide performance guidelines covers concepts of performance and adequacy, and guideline development. An overview of components of the performance measures developed for the project examines the process involved in their development, the assumptions underlying the measures, their scope, and their general applications. The most promising applications of the guidelines for the Oklahoma Department of Libraries (ODL) are then discussed more specifically. Finally, processes for assisting public libraries with local needs assessment and planning are outlined. An appendix describes procedures for systematically compiling and reporting local library data using data matrices, data graphs, and narrative reporting. (LMM)

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STATEWIDE PERFORMANCE GUIDELINES
FOR
OKLAHOMA PUBLIC LIBRARIES

Prepared for:

The Oklahoma Department of Libraries
Oklahoma City, Oklahoma

Prepared by:

King Research, Inc.
6000 Executive Boulevard
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IR050308

October 1982

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PREFACE

This project grew out of the deliberations of a joint standards committee appointed by the Oklahoma Department of Libraries and the Oklahoma Library Association. The committee considered the difficulties and limitations of public library standards in Oklahoma and began discussions on possible new approaches. Oklahoma Department of Libraries Director Robert L. Clark, Jr. investigated various ways in which the state library agency could continue to be active in library development without preempting local initiatives. Dr. Charles McClure of the University of Oklahoma working with the joint standards committee developed a concept for moving from public library standards to the development of statewide levels of adequacy.[1] Members of the staff of King Research. Inc. were involved in these discussions and contributed proposed approaches to developing statewide levels of adequacy.

The project, "A Study to Develop Statewide Levels of Adequacy," was conducted by King Research, Inc. for The Oklahoma Department of Libraries with the active involvement of a joint Oklahoma Department of Libraries/Oklahoma Library Association Standards for Public Libraries Committee. That Committee's contribution in guiding the selection of performance measures and in reviewing interim products of this project is gratefully acknowledged. Committee members are:

Jan Blakely, Oklahoma Department of Libraries
Lee Brawner, Oklahoma City Metropolitan Library System
Robert Clark, Jr., Oklahoma Department of Libraries
Aaron Corwin, Past President, Oklahoma Library Association
Sandra Ellison, Oklahoma Department of Libraries
J. Conner Fitzgerald, Stillwater Public Library
Esther Henke, Oklahoma Department of Libraries
Jan Keene, Tulsa City-County Library System
Lester McKiernan, Choctaw Nation Multi-County Library System
Jane Northcutt, Ponca City Public Library

[1] Charles McClure, "From Public Library Standards to Development of Statewide Levels of Adequacy," Library Research, 2, 1980-81, pp. 47-62.

Virginia Owens, Oklahoma Department of Libraries
Mary Woodman, Elk City Carnegie Library
Pat Woodrum, Pres. OLA, 1979-80

Oklahoma Department of Libraries consultant staff attended meetings, contributed to the development of the project material and participated in the testing of the performance measures. The consultants involved were: Cathy Cook, Blane Dessy, Dean Doer, Susan Galloway, Allen Goode, John Hinkle and Beverly Jones.

The performance measures data gathering and analysis procedures were pretested in the three Oklahoma public libraries: H. F. Tyler Memorial Library (Dewey), Cheryl Schiermeir, Director; Miami Public Library, Joyce Wallen, Director; Western Plains Library System, Dee Ann Ray, District Librarian. We are grateful for the energy and interest given by the staff and volunteers from these three libraries.

The staff from King Research, Inc. involved in the project were:

Vernon E. Palmour
Eleanor J. Rodger
Douglas L. Zweizig, Project Director

Charles McClure of Information/Management Consultant Services, Inc. served as part of the project staff. Toward the end of Phase II of the project, Alphonse F. Trezza was asked to participate in the revision of the Statewide Performance Guidelines for Oklahoma Public Libraries and to conduct the evaluation phase of the project. For the Oklahoma Department of Libraries, Denny Stephens provided valuable support as Project Coordinator.

The project consisted of three phases:

Phase 1 - Development of concepts and performance measures.
Phase 2 - Testing of concepts and performance measures in selected public libraries.
Phase 3 - Evaluation of process and final documentation.

This report and its companion report, Performance Measures for Libraries: A Manual for Oklahoma Public Libraries, are intended for two different audiences; this report being directed at state level library officials with policy responsibilities and the companion report being a manual for public librarians at the local level.

King Research, Inc.
Rockville, Maryland

CHAPTER 1

INTRODUCTION

Purpose and Objectives of Project

The overall purpose of this project was to develop a method or process for the Oklahoma Department of Libraries to determine state levels of adequacy of public library services, to measure the current statewide performance, and to plan statewide strategies for improving performance. Effective means of monitoring and encouraging improved library services is essential if the ODL is to meet its legal and professional responsibilities.

Statewide performance guidelines are criteria that delineate the levels of service available to public library users throughout the state which ODL defines as adequate. The guidelines address several facets of library service and resources and specify various levels of service for communities of various sizes. For example, ODL might determine, based on initial data from Oklahoma libraries, that library users in towns with populations of 10,000 to 25,000 should have a 60% chance of obtaining the specific title they go to the library to find. The determination might be made that for residents of communities with populations over 25,000 the title fill rate should be 75%.

Specific objectives were:[1]

1. Define evaluation criteria, or measures, for determining levels of adequacy for public library services.

2. Develop a method for establishing statewide norms for the measures.

3. Develop a method of using these measures to assess adequacy of service to the users of local libraries. Consideration must be given to the roles and responsibilities of the local level, the state library agency, and the system of cooperative activities among libraries.

[1] Based on "End Products" list, correspondence from Robert L. Clark, Jr. to Nancy DeWath, KRI, February 17, 1980.

4. Develop strategies for improving library services appropriate for the local, state, and cooperative level.

5. Develop guidelines for the state library agency's role in assisting local libraries in achieving appropriate levels of adequacy.

CHAPTER 2

PUBLIC LIBRARY DEVELOPMENT

The purpose of this chapter is to provide, as background information, a brief review of public library development in the United States and the State of Oklahoma focussing primarily on the role of public library standards, the measurement of public library performance, and the role of state library agencies in fostering public library development.

Public Library Development in U.S.

The origins of the public library in the U.S. go back to the early years of the nation. Even before the establishment of the first free public library in New Hampshire in 1833, the early settlers knew the value of books and other printed materials for enhancing educational and cultural activities. By the late 1800's, the American society had clearly recognized the role of public libraries in promoting social progress and individual improvement.

Today the American public library community consists of:

- 8,717[2] central public libraries, with a total of 70,956[1] libraries including central, branch, bookmobiles, and other units
- 439,486,000[1] volumes of materials (books)
- 26,007,000[1] new volumes added
- 986,715,000[1] volumes circulated
- $218,000,000[3] spent on supplies and materials
- 93,335[1] employees, with 38,702[1] of them professional librarians

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[1] Digest of Education Statistics 1981. NCES81-400. By Vance Grant. Washington, D.C.: U.S. Government Printing Office, 1981. (1977 data)

[2] The Bowker Annual of Library and Book Trade Information. 26th edition. New York: R.R. Bowker Company, 1981. (Based on number of central public libraries listed in the 33rd edition of the American Library Directory 1980.

[3] The Bowker Annual of Library and Book Trade Information, 1981. (In most cases the statistics reflect expenditures for the 1978-1979 period.)

As these figures indicate, the public library is a large institution in our society.

Public Library Standards

The American Library Association (ALA) published the first national standards for public libraries in 1933. These first standards were brief statements that public libraries ought to have adequate funds and resources. At intervals of about 10 years, ALA continued to publish national standards for public libraries with the last revisions published in 1966. Typically the standards attempted to state criteria for what was indicated as minimum levels of services and resources required for a "good" library. As Martin [4] pointed out, the levels included in the standards represented the "wisdom of the seers" and carried more weight among librarians than among nonlibrary authorities and the public at large. This is not to say that public library standards were not successful in helping to stimulate the funding of libraries.

In the early 1970's the Public Library Association (PLA) of the ALA decided against the revision of the 1966 standards. Several PLA task forces investigated the needs of the public library community and concluded that tools were needed to help librarians analyze their own community needs, set objectives, make decisions, and evaluate achievement. A project was sponsored by PLA, funded by the U.S. Office of Education, and resulted in the "Planning Process."[5] The approach is a departure from the previous kinds of standards. The kinds and levels of services are to be determined as a result of the planning process at the local and state level.

Measurement of Performance in Public Libraries

One of the cited weaknesses of the public library standards was their emphasis on the levels of resources thought to be minimum requirements as inputs

[4] L. A. Martin, "Standards for Public Libraries," Library Trends, 21(2), October 1972, pp. 164-177.

[5] V. E. Palmour, M. C. Bellassai, and N. V. DeWath, A Planning Process for Public Libraries, Chicago: American Library Association, 1980.

necessary for the provision of "good" library services. Some public library leaders felt that a new emphasis was needed on the outputs of libraries rather than inputs. Output includes the levels of services actually provided. The measurement of service outputs is generally referred to in the library literature as performance measurement. DeProspo and colleagues[6] laid the groundwork for systematically measuring certain aspects of public library performance. The public library planning process built upon this earlier experience and attempted to incorporate performance measurement in a planning framework, specifically as measures for objectives.

Perhaps the greatest difficulty with library performance measurement is the interpretation of the findings. We quickly find ourselves facing the same dilemma as those establishing standards in the past. What is a "good" result? Is a ratio of circulation to the population served of 2.5 good? Some argue that the question of what is good is not relevant, and that what is important is that a library measure itself to establish benchmarks against which to evaluate progress. Others insist that without some kind of standards or guidelines, such measures are useless.

In considering the above mentioned dilemma, i.e., what is a "good" result on a performance measure or what constitutes a "good" library, the distinction between measurement and evaluation is useful. Measurement is understood here as the process of specifying the actual library performance. Evaluation applies judgment or other criteria to the results of measurement to assess the levels of performance.

Expected levels of performance can be developed based on a number of factors, but will never jump out of the measurement data and present themselves as the right and true standards. Expected levels of performance can be best formulated and articulated when a library, library system, or the state library agency goes through a planning process to determine its goals and objectives. The expectations about levels of performance which allow evaluation to be

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[6] E. R. DeProspo, E. Altman, and K. E. Beasley, Performance Measures for Public Libraries, Chicago: American Library Association, 1973.

done based on measurements will be clear if the agency doing the evaluation has articulated its goals and objectives. For example, if a local library has determined that meeting current user needs for recreational reading is one of its goals, it will evaluate its book turnover rate in light of this goal. A turnover rate of 1.5 would probably not be considered adequate for such a library.

In addition to evaluation in terms of their own goals and objectives, libraries will certainly compare their scores with the scores of other like libraries to see how they are doing. This kind of evaluation assumes that libraries are providing the same basic services and are serving a community whose population and characteristics (i.e., age, education, cultural heritage, economic status, etc.) are relatively similar. Libraries will also look historically at their own data to identify trends, determine causes, and study ways of improving performance by use of the new performance measures.

Role of State Library Agencies

State library agencies have become important instruments for stimulating the development of public libraries. The passage of the 1956 federal legislation, Library Services Act, greatly strengthened the positions of state library agencies. These agencies became responsible for planning and administering federal funds for providing library services to rural areas. The functions of planning, coordination, and evaluation became important as the federal programs increased and expanded. With the Library Services Act and its successor, the Library Services and Construction Act, the state library agencies took on a role as a regulatory agency in connection with administering large sums of federal and state funds.

The federal library programs created the need at the state level for criteria against which public library services could be compared. States adopted standards very much like the national ones. They usually waited for the national professional organization to set standards and goals for public libraries, and then either adopted them officially or accepted them implicitly in their statewide plans for development. However, since 1966, many states have issued or revised state standards. In most cases, the development or revision of standards was a joint effort of the state library association and the state library agency.

The use of standards in states have been, for the most part, in relation to the distribution of federal and state funds. Public libraries must meet certain minimum standards to qualify for receiving federal and state funds. Typical minimum standards used by states have specified the number of books owned per capita, number of library staff per capita, number of hours open, and expenditures per capita. Most of the state standards have been minimum levels of resources (inputs) to qualify for state aid or federal funding. They tend to fall below what is normally believed to be adequate levels. (The application of state standards as instruments of policy for public library development require highly political judgements.) There is a need for a set of realistic standards that will encourage and promote improvement of weak libraries and at the same time not hinder the continued development of the strong libraries. Some librarians feel that low minimum standards insure the justification of higher funding for stronger libraries at the local levels.

There exists within the library community a consensus that it is the role of the state library agency to take the leadership in planning and coordinating public library development statewide. The National Commission on Libraries and Information Science recognized the important role of state library agencies in its national plan.[7] One of the pressing needs of state library agencies is for better tools to assist in planning for library development.

McDonough and Palmer[8] stated that the profession's preoccupation with structural change (i.e., networks, and local-state-federal relationships as ag[illegible] for improved services) must give way to careful evaluation of the quality of service as it actually transpires between the library and the patron.

Public Library Development in Oklahoma

The first public library opened its doors for service in Guthrie in 1901. This was 6 years before statehood. By 1981 selected key statistics on public libraries in Oklahoma were:

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[7] The National Commission on Libraries and Information Science, Toward a National Program for Library and Information Services: Goals for Action, Washington, D.C.: 1975.

[8] R. H. McDonough and D. C. Palmer, "Standards for State Libraries," Library Trends, 21(2), October 1972, pp. 178-189.

- 126 public libraries
- 4,207,000 volumes of materials
- 248,000 new volumes added
- 7,465,000 volumes circulated
- $14,352,000 annual expenditures
- 727 employees

The State Library of Oklahoma, a predecessor of The Oklahoma Department of Libraries (ODL), had its beginning with the establishment of statehood for Oklahoma in 1907. The development of library service for unserved residents of Oklahoma was the responsibility of the Oklahoma Library Commission, established in 1919. Its threefold task was to expand library service to rural areas, raise standards of libraries and reading, and to provide library instruction. After years of struggle to provide a legal and financial base for library service, enabling legislation was passed in 1929 allowing the establishment of county-wide library service. Due to a constitutional amendment passed in the early 1930's, this legislation had very little effect.

In 1953, the Oklahoma Library Commission was reorganized as a Division of the State Library. Activity in the political area centered on creating legal structures to facilitate the development of multi-county library systems, culminating in the 1955 Multi-County System Act. This legislation, coupled with funds available from the federal Library Services and Construction Act (LSCA) resulted in the beginning of the establishment of multi-county library systems in Oklahoma. There are presently six multi-county and two city-county systems.

The present Oklahoma Library Code was enacted in 1967, creating the Oklahoma Department of Libraries with responsibilities for encouraging library development throughout the state as well as administering the State Library.

In the last five years, ODL has created two major planning documents, A Needs Assessment Study of Oklahoma Libraries completed in 1978 by Battelle Laboratories and, in 1980, the Oklahoma Long Range Program FY 1981-1985. This study continues in the tradition of these two planning resources by providing ODL with processes for determining levels of adequacy available in the state and methods for developing public library service to Oklahomans.

CHAPTER 3

STATEWIDE PERFORMANCE GUIDELINES

The Oklahoma Department of Libraries (ODL) is the state agency responsible for providing leadership in the development of public libraries in the state. Public library standards are used as one tool for promoting basic development. Public libraries must meet these minimum standards to receive state and federal funds. ODL has recognized the need for improved tools for assisting in the development of public libraries.

Because of current economic difficulties nationwide and a change in philosophy of the current administration in Washington, ODL and the other state library agencies are facing the possibility of reduced federal funds. It is therefore even more critical that state funds be allocated in a most effective manner. ODL is interested in determining more efficiently and effectively the adequacy of public library services. Improving library services requires a knowledge of current levels of performance and the ability to monitor change and progress.

At the national association level, the emphasis is currently on planning at the local level using PLA's "Planning Process." This planning process calls for individual libraries to study their communities to determine needs, assess their current services, and monitor progress after changes have been introduced. While most laud such comprehensive planning, not all public libraries will have the resources to undertake this level of planning. This is particularly true for small libraries. i.e., those under 25,000. ODL is well aware that the planning process is time consuming, requires trained staff and most of all a commitment from the director of the local library as well as the Board. Consequently, a method or procedure is needed that will involve ODL in encouraging and assisting libraries to utilize the planning process to assess their current performance and to identify ways to improve.

Concepts of Performance and Adequacy

Performance is generally used in the sense of how well a function is carried out. While the concept may be straightforward, the actual measurement

of performance is often complex. Libraries offer a variety of services. Measuring the quantity of services, e.g., the number of reference questions answered, is much easier than measuring the quality of services, e.g., the percentage of all reference questions answered correctly. Because of the difficulties in defining and measuring quality of service, most library performance measures address quantity of service delivered. This is the reason that we have chosen the term performance rather than "effectiveness" which gets more at quality from the patron's perspective.

Why measure performance of libraries? A typical answer is to see how well the library is doing. That response implies that some standard or guideline exists which allows the determination of "how well." The measurement of an improvement or a change must be made with reference to some standard of comparison. We shall be concerned with two kinds of comparisons. In the first instance, we are concerned with how the performance of a single library changes over time. In the second kind of comparison, one is concerned with how the performance of one library compares to another library that is similar in size and characteristics.

Comparison standards identified as the basis for evaluation are generally referred to as "evaluation criteria". For example, assume that a library's goal is to improve a specific service. The criteria for evaluating improvements might include: cost, timeliness, and usage. Once suitable evaluation criteria are identified, operational definitions must be developed for each criterion, e.g., how do we measure timeliness of interlibrary loan. Specific definitions are referred to as measures. The average time (in number of days) from placing a request for an interlibrary loan to its receipt may be the measure for the timeliness criterion. A specific value of a measure is referred to as a score.

Webster defines adequate as being sufficient for a specific requirement. How do we determine if library services are adequate? McClure[1] defines adequacy as the level of performance on a selected criterion that the state library agency, the local library, and the community being served agree is appropriate. Determining the community view is difficult but basic.

[1]C. R. McClure, "From Public Library Standards to Development of Statewide Levels of Adequacy." Library Research 2, 1980-81, pp. 47-62.

Moran[2] argues that the term "adequate" cannot be meaningfully applied to university libraries since it is impossible to measure the library's educational performance. At a later point, the author concludes that statements of adequacy may have practical value, even if a theoretical basis of adequacy does not exist. We agree that no sound basis is available at the theoretical level to decide what is adequate in the way of library services. But we do believe that the concept of adequacy has practical value.

No single set of standards will be sufficient for all applications by ODL, therefore we should not expect a single level of adequacy to be valid for all applications. For example, it may be reasonable to require only a very minimum level of adequacy for a few selected criteria to meet accreditation requirements. State aid distribution could be based on quite a different level of adequacy. In fact even for a specified criterion (e.g., interlibrary fill rate) the process may establish different levels of adequacy for different size libraries.

Development of Statewide Performance Guidelines

The project has developed and tested a process for establishing statewide performance guidelines. The process is based on the following steps:

1. Define library services and evaluation criteria.
2. Define measures and methods for determining measures.
3. Collect data and compute individual library scores on measures.
4. Interpret and analyze at the local, cooperative, and state levels.
5. Establish levels of adequacy.
6. Apply performance guidelines.

Step 1 was the identification of the library services and resources for which performance guidelines were desired and the definition of meaningful evaluation criteria. Steps 2 and 3 are reviewed in the following chapter, and spelled out in detail in Performance Measures for Libraries: A Manual for Oklahoma Public Libraries.

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[2] M. Moran, "The Concept of Adequacy in University Libraries," College and Research Libraries, 39 (2), March 1978, pp. 85-93.

The most difficult step is the interpretation and analysis. After the first cycle of the process for a single library, no benchmarks will be available to indicate whether the scores are "good" or not. Some preliminary data may be available from other libraries in the state from their first cycles. Obviously, the library staff involved will have some sense of a very poor or a very good score. At the state level, a set of norms or averages for libraries of similar sizes should be developed. Such a matrix would show for a given size of library the average scores for all libraries in that class for each measure. Norms give a library the opportunity to compare themselves with other similar size libraries.

Determining the levels of adequacy for specific applications must be a shared responsibility representing the best judgement of librarians at the local and state levels.

The ODL, working closely with local libraries, library systems, and regional and statewide library cooperative agencies, can review the data collected and, based on their analysis, determine the levels of adequacies for the various performance measures. These levels are based on current data and can only serve for a limited period of time. A review and a new analysis needs to be undertaken in no less than three years or more than five. To be valid and effective, a high rate of statewide participation in the collection of the data is essential. All of the major public libraries in the state and at least 65-70% of the others must participate in the performance measures process and supply data to ODL. All measures need not be collected annually.

CHAPTER 4

MEASURING PUBLIC LIBRARY PERFORMANCE

Introduction

This chapter presents an overview of the components of the public library performance measures developed for this project as a method for determining the levels of adequacy for the public libraries of Oklahoma. The process involved in the development of the measures, the assumptions underlying the measures, their scope, and general comments about their application are examined.

Process

The particular performance measures for public libraries that have been developed for this project[1] were selected by the Oklahoma Standards Committee for Public Libraries, a joint enterprise of the Oklahoma Library Association and the Oklahoma Department of Libraries. This advisory committee met during the fall of 1980 to review existing data describing local public libraries and to determine measures they believed would provide additional useful information. The measures were selected from a long "shopping list" of potential measures provided by the contractor.

Criteria used in selecting the twenty-eight measures and checklists to be field tested included:

- ease of data collection. Where possible, measures made use of data already required by the Oklahoma Department of Libraries (ODL) as part of its annual reporting procedures. When new data were required, consideration was given to whether the time, money, and effort required to gather the data were affordable.

[1] Performance Measures for Libraries: A Manual for Oklahoma Libraries. Rockville, MD.: King Research, Inc., October 1982.

- usefulness for library management and planning. Scores on most of the measures selected can be improved by library administrative or board action.

- degree of user and potential user focus. Many of the measures provide data about services a library provides to its community, not just resources it commands.

- ease of interpretation. The outcome of the performance measures need to be easily understood by librarians with varying amounts of training, as well as by library boards and local and state officials who oversee library funding. Efforts were made to select measures for which the final statement of library performance could be easily and quickly understood by this diverse clientele.

A manual, Performance Measures for Libraries: A Manual for Oklahoma Public Libraries, was developed by the contractor giving specific procedures for each selected measure. This manual was designed to provide simple but methodologically rigorous directions for obtaining each measure. Such tightly structured definitions and procedures are essential if data resulting from the procedures are to be comparable among libraries or for the same library over time.

The measurement process was field tested in three Oklahoma libraries in the spring of 1981 by staff from King Research, Inc. and the Oklahoma Department of Libraries. Estimates were obtained from participating librarians concerning the levels of effort required to collect and manipulate the data. A draft manual was prepared as a result of the field test experiences. Further field testing in ten libraries was conducted by ODL consultant staff.

Scope of the Performance Measures

There are two kinds of indicators of performance included in the local library manual; performance measures and checklists. The performance measures

are those indicators of library activity or resources that can be expressed using mathematical calculations. The product of a performance measure is a numerical score, sometimes a whole number, sometimes a decimal, and sometimes a percentage.

The advisory committee wished to include some focus on aspects of library resources, activities, and procedures which did not lend themselves to easily computed and quickly understood mathematical procedures. To meet this need, a number of checklists were developed addressing such areas as cooperative activities and administrative procedures. These were designed to provide inventory type information, not comparable numerical data.

Many of the performance measures developed for this project are output measures, that is, they are indicators of the services resulting from library activity. Some examples of output measures are title and subject fill rates and reference questions per capita.

Some of the performance measures provide information about the level of support and resources that go into a library. Such input measures include items held per capita and per capita support. The advisory committee believed that both input and output measures are required to create an accurate picture of the condition of a library.

There are three characteristics of library performance which can be measured. Each of the developed measures addresses only one characteristic. A measure may address:

- Extensiveness - how much of this service or resource is taking place or available?
- Efficiency - how well are we managing the resources we have?
- Effectiveness - how well are we doing what we are doing?

The scope of the performance measures and checklists developed for Oklahoma Public Libraries is fourfold, reflecting what the advisory committee believed to be the four most important measurable facets of public library services and resources. As can be seen in Table 1, which summarizes the measures, each of the facets has several performance measures grouped under it and some have checklists as well. The Community Penetration measures are designed to provide indications of the extent to which members of a library's community are aware of its services, and how much they make use of them. The User Services measures are those relating directly to user behavior - attending programs, requesting materials, asking questions, and checking out materials. The Resource Management measures reflect internal management decisions about how funds are allocated, i.e., choices made about materials, facilities, and staffing patterns. The final facet of library activity addressed in the performance measures is that of Administration and Finance. Measures grouped under this heading reflect decisions made by the library's governing jurisdiction as well as by its board and director.

Application of the Performance Measures in Local Libraries

The performance measures listed in Table 1 were developed to be used by local libraries and cooperative library systems as management tools. Data from these measures will also be collected by ODL for use in assessing levels of adequacy in the public libraries of Oklahoma. The use of the data by the Oklahoma Department of Libraries will be addressed in the next chapter.

A number of factors are relevant when considering the use of performance measure data at the local library level. Discussion of the three major concerns follows. The first concern is that library administrators, boards, and funders understand that there is no single score on any of the measures that is necessarily right for all libraries. These measures are meant to be used in conjunction with the goals and objectives determined by the library, or established by ODL as statewide goals and objectives. For example, a goal of increasing library service to children might result in objectives such as, "Increase juvenile program attendance per juvenile capita to x," or "Improve the ratio of juvenile percentage of circulation to juvenile percentage of population to a:b."

TABLE 1. SUMMARY OF PERFORMANCE MEASURES
BY TYPE OF MEASURE

Measure	Characteristic		
	Extensiveness	Efficiency	Effectiveness
Community Penetration			
Circulation per capita	x		
*Community awareness of library services	x		
Users as a percentage of population	x		
*Registered borrowers as a percentage of population	x		
User Services			
Title fill rate			x
Subject fill rate			x
Reference questions per capita	x		
Adult program attendance per adult capita	x		
Juvenile program attendance per juvenile capita	x		
*Juvenile percentage of circulation: juvenile percentage of materials budget			x
*Juvenile percentage of circulation: juvenile percentage of population			x
ILL fill rate (OTIS sites)			x
*I & R services checklist			
Resource Management			
Collection turnover rate			x
Range of hours open			x
XRatio of staff to population			x

TABLE 1. SUMMARY OF PERFORMANCE MEASURES
BY TYPE OF MEASURE (Continued)

Measure	Characteristic		
	Extensiveness	Efficiency	Effectiveness
Resource Management (cont'd).			
X Ratio of staff to circulation		x	
X Square footage per capita	x		
Items held per capita	x		
Percentage of holdings intended for juveniles			x
Cooperative activities checklist			
Collection checklist			
Administration and Finance			
Per capita support	x		
Local library funds as percentage of total local budget	x		
Materials as percent of total expenditures		x	
Salaries and wages as a percent of total expenditures		x	
Percentage of staff participating in continuing education	x		
Administration checklist			

Suggested frequency of collection - annually unless otherwise indicated.

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* every two years

X every three to five years

Another facet of these measures is the understanding that they not be used in isolation from one another. While it is not the intention that all the measures be used by all libraries every year, use of a variety of measures by a library will produce a composite picture which is a valid component in its evaluation.

The two most useful ways of analyzing the performance measure data require a bit of patience and acceptance of delayed gratification. The first kind of analysis focusses on examining scores on the same measure for the same library over a period of time. This might mean, for example, that a library would examine its turnover rate from year to year for indications as to whether efforts to modify the collection through acquisitions and weeding have resulted in heavier use.

The second kind of analysis involves a library comparing its performance on one or more of the measures to that of comparable libraries in the state. A number of caveats are in order about this kind of analysis. As was mentioned earlier, performance measures are meaningful management tools when they are tied to a library's goals and objectives. A library comparing its score to that of another library may have, indeed probably will have, differing goals and objectives. For example, this may mean a research oriented public library with a moderate turnover rate may be meeting or exceeding its own objectives, but may have a lower rate than a library which sees itself as existing primarily to meet the current reading needs of its public. (This may also mean that the library selected for comparison is not the appropriate one.) Statewide goals and objectives which address some aspects of library service may allow for more appropriate comparisons in those areas because it will have been determined that all libraries will emphasize these specific aspects.

All the performance measures and checklists developed for this project are designed to be collected at the local level, but are available for interpretation at the local, cooperative system, and state levels. At the local level, each library obtains the appropriate data and computes its own scores. At the cooperative system level, composite scores are computed for the system as a whole. Ranges of scores within the system may also be formulated. At the state level, scores may be ordered in ways that libraries serving similar sized communities can be viewed together. Composite scores may also be determined for the state

as a whole; or for groups of libraries. Appendix A of this report outlines procedures for compiling and reporting local library data.

The interpretation of the data, together with weighing the amount of time, energy, and money which will be devoted to improving scores on the various measures, will be a function of the goals, objectives, and priorities of libraries at each level. A local library may choose to emphasize increasing circulation for a two year period. Its administrators and board may wish to pay special attention to measures such as circulation per capita, title and subject fill rate, juvenile percentage of circulation: juvenile percentage of population, and collection turnover rate. A cooperative system may choose to focus on increasing its visibility and use as an information center. Performance measures which would contribute most to its information about such a function would include community awareness of library services, reference questions per capita, and the I & R services checklist. The state library may have a primary concern for the level of awareness of library services in the state as a whole, and would look closely at both the single scores for community awareness of library services from the libraries in the state and also the awareness rates for particular services.

Data analysts need to think through what constitutes a "comparable" library or library system. A traditional categorization for library data analysis has been to compare libraries that serve communities of similar sizes. It may be equally, if not more, meaningful to compare libraries categorized by similar expenditures per capita or by similar demographic statistics such as average educational level. When a set of statewide data is available, or when community library profiles are developed, comparisons should be constructed based on these variables to determine which are the most meaningful.

A third concern, one which this project specifically addresses, is that the procedures and definitions for determining the measures be consistently applied. The standardization of definitions, data collection procedures, and calculations will mean that apples can truly be compared with apples. Local deviations and innovations will erode this facet of comparability.

The manual of procedures for these measures[2] can stand alone for local library use. Each measure is described, the data elements (components of the

[2] op. cit.

measures such as population and annual circulation) are defined, data collection procedures are spelled out and forms provided, and appropriate calculation processes are described and demonstrated. In addition, an "Analysis and Use of Data" section is provided which includes suggestions for determining what the data may indicate as well as suggestions to administrators for improving the library's performance on the scores, should that be deemed appropriate.

Some libraries can, if they wish, use the local library manual without assistance. The consultant staff of ODL may wish to work with libraries throughout the state who agree to participate, especially for the first time. Chapter 6 of this volume provides resources for ODL staff to use in working with local libraries to implement the performance measures alone or as a part of a local planning process.

CHAPTER 5

APPLICATIONS OF PERFORMANCE GUIDELINES AT THE STATE LEVEL

There exists a wide range of possible applications of statewide performance guidelines. The purpose of this chapter is to discuss those areas that appear to be of greatest value to ODL. As the state library agency, ODL is responsible for planning, coordinating, and evaluating programs and services as they relate to the development of public libraries. ODL is responsible for determining the allocation methods for the distribution of state and federal funds targeted for public libraries.

The first area of application is the use of performance guidelines to set levels of adequacy expected for cooperatively provided library services. Next, performance measures are considered as the basis for allocating some portion of state aid to public libraries and in specifying outcomes of grants made by ODL. The fourth area of possible applications considers use of performance measures in the accreditation of public library agencies. Performance measures are next presented as a way of evaluating the progress toward the goals and objectives of the Battelle Report. The last two areas of application address the role of performance guidelines in evaluating programs and projects and in monitoring public libraries services.

Cooperative Library Service: Levels of Adequacy

The gradual implementation of the performance measures and checklists developed for this project will result in a rich composite picture of the state of public libraries in Oklahoma. Statewide norms and ranges will be known for the performance measures, and the checklists will produce inventories of administrative procedures, cooperative activities, collection development practices, and information and referral practices. Two ways of interpreting these data will assist ODL in its policy decisions about the responsibilities of local and state level agencies for library resources and services.

For the scored performance measures, it is appropriate in some cases to look at state and local cooperation as providing incremental levels of service.[1]

[1]This section deals only with state and local levels of effort because those are the two levels from which revenue is obtained for library support. Cooperative

For example, it might be determined that a user could reasonably expect a 60% title fill rate at the local level and a 75% title fill rate when the state funded ILL system is used. Measures which seem particularly suited to an assessment of incremental levels of support or service include:

- circulation (both external and internal)
- title fill rate
- subject fill rate
- items held per capita
- per capita support
- juvenile program attendance per juvenile capita
- adult program attendance per adult capita

Before the responsibilities for library service at the local and state level can be assigned, however, consideration must be given to the existing norms in Oklahoma for the performance measures. It would be unrealistic to assign responsibility for the provision of a level of service out of reach of most of the libraries in the state. It must also be noted that the appropriate increase in the level of service expected due to state resources or services should be in proportion to the amount of resources and services provided. A few cents per capita of state aid money shouldn't be expected to make a huge difference in the levels of service, nor should a single workshop or a few hours of consultant time. If the proportion and amount of state funding increase in coming years, the differential in the level of services between state responsibilities and local responsibilities should also increase. The state has a right to get what it pays for, but the expectations of what it will get must be realistic.

A second appropriate way of looking at the responsibilities for various levels of governmental units for library service is to determine that specific services are the responsibility of agencies at each level. An example of such a service may be the availability of data base searching. The state may decide

that such a service is financially out of reach of many libraries, but could be done by the State Library or at OTIS sites for all requestors. The performance measures and checklists have less direct relationship to the establishment of these kinds of responsibilities, but such things as the materials format inventory on the Collections Checklist may be helpful. More relevant criteria for decisions on the identification of who should be responsible for what services involve cost benefit considerations, determination of need, and economics of scale.

The question of the responsibility of other types of libraries for various levels of adequacy is difficult to address. Privately funded libraries, such as most special libraries and the academic libraries at private colleges and universities, have, of course, no basic responsibility to provide services to persons other than their designated users. (They do, however, enjoy special status and benefits at taxpayer expense.) Libraries in the public schools and state supported colleges and universities have primary responsibilities to their students and faculties but have a secondary responsibility to all state residents because they are supported by public funds. No library is self-sufficient. Most libraries depend on cooperative efforts to serve their clientele and cooperation only works if it is mutually beneficial.

If libraries in a specific geographic area decide to cooperate on various projects or services, some of the performance measures may provide both a structure for cooperation and a means for evaluating the effect of cooperation. For example, a public school-public library cooperative effort might be directed at increasing the subject fill rate for users of both libraries by making the works held by them both available to users of both. A preliminary subject fill rate survey could be done to determine the "before" needs and to assess areas of weakness (unfilled requests) in each collection. A union catalog might be developed to give users bibliographic access to the holdings of the cooperating libraries. If the strengths and weaknesses of the cooperating libraries are not complementary, a cooperative acquisitions plan might be implemented. If the libraries are not close together, a delivery system might be a part of the cooperative effort. After a period of implementing these steps, another subject fill rate survey should be conducted to assess the effectiveness for the user of the cooperative plan. Some libraries which share resources are concerned that they will be heavy

net lenders. Part of the cooperative agreement could be that each library would maintain an ability to fill at least 60% of its needs from its own resources. They could also have an agreement for reimbursement for net lenders for loans above a specified level with funding from local and/or state sources.

Use of Performance Measures in the Allocation of State Aid

It is assumed that ODL will administer state aid based on a number of considerations. For example, a portion of the aid may be allocated on a per capita basis, with the assumption that since all state residents pay into the tax pot, everyone should receive at least minimal benefits. Part of the aid may be understood as equalization money and used to strengthen library services in areas with low tax bases and/or widely scattered populations. This section concerns that portion of state aid which ODL designates specifically to encourage public library performance in the state. Its recommendations are based on two assumptions:

- Money is a motivator for library behavior. This is more or less true for any specific library, but it is assumed for libraries in general. It is also assumed that generally the amount of money relates to the amount of change in behavior which can reasonably be expected. Experience, however, shows that at both the state and national levels relatively small amounts of money provide strong incentives for changes, experiments, feasibility efforts and new services.

- Money can improve scores on performance measures. This assumption is important here because the focus of this section is on allocating state funds. Money is at least a necessary if not sufficient condition for improving performance.

ODL should allocate a portion of its state aid in the form of matching and incentive grants to encourage the adaptation of new practices and procedures

which will improve and/or offer new library services. This would mean that ODL would determine priority areas for library development, based in part on relevant performance measurement data, and then establish a grant process to encourage local libraries to improve their performance measures in that area.

ODL might determine that the number of reference questions per capita throughout the state is unacceptably low. Announcing that this is the priority for a current or future year, it would then solicit projects from libraries designed to increase their number of reference questions per capita. The appropriate match of state and local funds would be determined (e.g., 50-50, 75-25). A simple proposal form would be supplied to libraries wishing to participate, requiring the present number of reference questions per capita along with a clear plan as to what the intended project would irvolve, including a budget and a time schedule. An evaluation process for the proposals would be established at ODL and the money would then be allocated. Each project should have delegated consultant oversight and accountability at its conclusion.

Use of Performance Measures in LSCA Grants and Allocations Procedures

LSCA funds have been used by state library agencies for a variety of kinds of projects. The appropriate applicability of performance measures depends to a great extent on priorities that have been determined for the use of LSCA funds. Designated Program Areas for Title I Funds in Oklahoma include extending and establishing services in unserved areas, improving specific services in inadequately served areas, and provision of services for the blind and physically handicapped, persons in institutions, disadvantaged persons, and persons with limited English-speaking ability.

Basically there are three points in each of these programs at which performance measures can be helpful in significant ways - in the preliminary needs assessment, the formulation of project objectives, and project evaluation. An example of how this might work for one program area follows.

For purposes of illustration, assume service to institutionalized persons as a program area. It may be felt that resources at the state prison are inadequate to provide answers to many of the questions of the inmates. A subject fill

rate survey is done and the actual fill rate is determined to be 25%. Funds are requested to upgrade the collection in areas where resources could not be found. The specific objective is stated as, "To increase subject fill rate to 60% by the end of the project period." Assume collection development funds are awarded. At the end of the project year, another subject fill rate survey is conducted to see if the 60% objective has been achieved.

Many of the Criteria for Determining Adequacy stated in the Oklahoma Long Range Program relate to library inputs - staff and materials. The employment of appropriate performance measures can add the dimension of determining what differences to users resulted from the application of LSCA funds.

Use of Performance Measures in the Accreditation of Public Library Agencies

Appropriate use of performance measures as part of a process for accrediting public libraries rests to some extent on what weight it will carry and with whom for a library to become accredited. What tangible or intangible rewards will accreditation offer? Possible tangible rewards include increased funding or increased resources made available. Accredited libraries might receive $.10 per capita additional state aid, for example, or quarter time service from a regional media specialist for a year. Intangible rewards include professional recognition and community pride in achievement, both of which have public relations value for a library.

Certification need not be established as an all or nothing condition. Levels of certification based on incrementally developed levels of service may provide a structure in which the achievement of the minimum service levels specified needn't signal an end to improvement.

Performance measures deemed relevant by ODL for certification might include:

- per capita support
- circulation per capita
- subject fill rate
- title fill rate

In addition, ODL may wish to mandate some of the items appearing on the checklists such as having written policies in the areas of intellectual freedom, collection development, personnel procedures, etc.

The appropriate levels of scores or the inclusion of checklist items should follow a decision as to exactly what purpose certification is intended to serve as a stimulus to library development. If statewide norms are used to define levels of adequacy, perhaps certification requirements should reflect minimal scores. More than one level of certification could be established using size of the community, number of volumes, and operating expenditures as determining factors.

Use of Performance Measures to Evaluate Progress Toward the Goals and Objectives of the Battelle Report

Some caution must be used in invoking measurement methods in the evaluation of projects which are developed independently of the methods. First of all, the mesh between the measurement processes and the expressed objectives may not be very satisfactory. Secondly, in an effort to make the mesh closer, the existing objectives or measurements may be stretched or adapted. This may well result in a closer mesh, but the original intent of the objective or measurement procedure may be distorted or refocussed.

Bearing these caveats in mind, some things can be said about the relationship between the objectives spelled out in the Battelle report[2] and the performance measures developed for this study. The performance measures and checklists can be employed to aid in the determination of local service requirements. Needs analysis might be partially based on data from measures such as:

- registered borrowers as a percentage of population
- reference questions per capita
- number and range of hours open
- ratio of staff to population
- items held per capita

[2] Beverly A. Rawles et al., A Needs Assessment Study of Oklahoma Libraries (Columbus, May 1978) p. 131ff.

- per capita support
- title and subject fill rate
- circulation

The measures do not specifically apply to the cooperation objectives. Use of the Cooperation Checklist may be helpful in the compilation of a report on existing cooperative activities in the state.

The checklists may be useful as a resource in discovering critical training needs for library staff. The Administrative Checklist, for example, will indicate how many libraries are without plans, personnel procedures, or written job descriptions. The performance measure on percentage of staff participating in continuing education will provide statewide data on how widespread CE is among library staff.

Perhaps the closest mesh of Battelle Study objectives and a developed performance measure is in the area of public awareness. The survey-derived community awareness of library services measure can give "before" data, provide a basis for the establishment of local and state objectives, and provide "after" data.

By the provision of needs assessment data, targets for objectives, and quantitative evaluation data, statistical justifications can be developed in support of increased state aid to public libraries. Some preliminary data will need to be gathered, priorities established based on needs expressed in hard figures, and then plans for improvement which are tied to specific objectives and evaluation mechanisms will be developed. It then becomes relevant to approach state funders with requests for funds to address these specific problems.

For example, statewide data might show that the average subject fill rate in libraries serving communities of fewer than 5,000 is only 35%. It is clear that collections with such poor hit rates are inadequate. State library planners may determine that a 60% subject fill rate is needed and set that figure as an objective. Estimates can be made to determine approximately how much it

would cost to develop the collections of these libraries so they would have a 60% average subject fill rate. The state legislature could be approached with a request for the required funds and would know, at the end of the planning cycle, whether or not the infusion of funds had accomplished the objective.

Use of Performance Measures for Evaluation of Program and Project Effectiveness

The performance measures developed for this project can contribute to program and project evaluation in a number of ways. It will be most helpful to consider their potential contribution to project and program effectiveness at the design stage, before addressing the evaluation stage.

Earlier in this volume the distinction was drawn between measurement and evaluation. The performance measures under consideration are tools for measurement, the end products of which are pieces of information about how particular facets of library operations or services are functioning. Being able to think and talk in quantifiable ways about library functions helps administrators and librarians precisely define the areas of concern which will be addressed by specific projects and programs. A vague notion about a collection not being all it should be can be refined into a description of the collection in terms of title and author fill rates, turnover rate, and circulation per capita. Given such "as is" information, goals and objectives for a project or program can be drawn up.

The performance measures should be used in evaluating a project only when they have supplied baseline data at the beginning and have been incorporated in the project design as objectives. At appropriate times throughout the project, as well as at its conclusion, the designated measures can be obtained to measure progress toward the stated objectives.

An example may help clarify this use of the performance measures. A library administrator believes the library collection doesn't meet community needs adequately. To see how well needs actually are being met, the Materials Availability Survey is conducted, resulting in information that the title availability rate is 38% and the subject availability rate is 47%. A project designed to develop the collection so it meets more user needs is developed. The project

includes weeding, buying duplicate titles of popular fiction and non-fiction works and expanding certain areas of the collection, thus increasing the proportion of the library's budget spent on materials. The objective is to increase the title fill rate to 60% and the subject fill rate to 70% at the end of the project period. The Materials Availability Survey is done again midway through the project to see if the strategies for improvement are effective. At the conclusion of the project, the survey is repeated to determine if the objectives have been met.

Use of Performance Guidelines in Monitoring Improvements in Public Library Services

Once the statewide collection and compilation of performance measures have been accomplished for most of the libraries, it is anticipated that ODL will review its current criteria for determining adequacy for public libraries and revise them accordingly. ODL may wish to consider defining adequacy at three levels: minimal, which would be the basis for accreditation of public libraries; average, which could be the requirement for basic state aid; and high, which would qualify libraries for matching incentive and special grants. Given the state-defined levels of adequacy, individual libraries may submit grant requests to implement and test strategies for improving their performance with regard to the various levels and specific services.

ODL can monitor the performance measures, as determined annually, in relation to the established levels of adequacy to decide on specific services to target for improvement. Grants or other incentives could be provided to stimulate these desired improvements.

CHAPTER 6

PROCESSES FOR ASSISTING PUBLIC LIBRARIES WITH LOCAL NEEDS ASSESSMENT AND PLANNING

The Oklahoma Department of Libraries can assist local libraries in the following ways: promoting awareness of the performance measurement process for Oklahoma public libraries, training librarians in the planning process and the use of performance measures for evaluation, assisting librarians in data collection and tabulation, assisting librarians in interpretation of performance measure data, and assisting librarians in using performance measures in planning.

Promoting Awareness of the Performance Measurement Process for Oklahoma Public Libraries

Any process to promote awareness and acceptance of performance measurement among public libraries in the state will need to address the following questions:

1. What is the performance measurement process?
2. How will using the process benefit my library?
3. What will the ODL do with data from my library reports?
4. What are the costs of participating?
5. What are the costs of not participating?

The answers to these questions will depend on policies of the ODL and are not inherent in the procedures for defining, obtaining, and interpreting performance measures.

We recommend that the ODL develop answers to these or similar questions before beginning any public presentation on the process. If explicit answers are not formulated, public libraries in the state will infer answers for themselves that may not be the ones the ODL intends. Inconsistency in the explicit and implicit messages given will result in misinformation and distrust.

We propose some of the following devices for promoting awareness of acceptance as particularly appropriate to this project:

1. Newsletter articles. The ODL could briefly describe the project and could report results on illustrative performance measures from existing data.

2. Using the results from test site libraries. One of the most powerful tools for diffusing an innovation is to demonstrate it. The test site libraries provided settings throughout the state where the collection and use of performance measure data was demonstrated. The reactions of the librarians and board members of the test libraries, with few exceptions, were positive. Utilize these librarians in the initial implementation phase of the performance measures process statewide.

3. Increasing awareness of PLA Mission Statement and A Planning Process for Public Libraries. The performance measurement process has been designed to supplement and be compatible with the planning process recently developed for public libraries. Promotion of the planning process is essential and will increase interest in performance measures; promotion of the performance measurement process will make the planning process more meaningful.

4. Making presentations at meetings of librarians or board members. Seek opportunities for speaking to library groups about the adoption of the performance measures process by ODL. Possible topics for such presentations are these:

   a. Definitions and examples of performance measures.
   b. Report of libraries' experiences in testing the process.
   c. How the ODL performance measurement process relates to national public library developments.

d. Training in methods for conducting a phone survey or user survey.
e. Uses of performance measures in local planning.
f. Uses of performance measures at ODL in state planning.
g. Uses of performance measures by ODL in distributing state and federal funds.

Training Librarians in the Needed Skills

For the performance measurement process, library staff will need to be able to administer user forms, train volunteers and staff to conduct phone interviews, tabulate results of surveys, and use elementary sampling techniques to estimate annual levels of activity. After the data are collected, the training needs to shift to planning skills: using the library data to assess performance, determining a role for the library, using a citizens' planning committee, developing goals and objectives, selecting strategies, monitoring progress, and developing an ongoing library data system. All these training areas involve a greater emphasis on skills than on content; therefore training activities should involve supervised practice more than platform presentations. With the test site libraries, the necessary content was communicated relatively quickly; the skills are best learned by involving the librarians directly in data gathering or in planning. As the number of libraries involved increases, different training designs will be employed, such as having test site librarians serve as resource people for regional training.

At first, the training can be held for the directors of public libraries and for the library staff who will directly participate in the process.

a. Training library directors.

Directors of libraries about to begin a performance measurement process will have predictable questions in mind:

1. What is the purpose of the process?
2. How much time will it take?
3. What skills will be needed?
4. What role will the ODL play?

In addition, the questions listed earlier, in the section "Promoting awareness of the performance measurement process for Oklahoma public libraries," will also arise. On the basis of these types of questions, the objectives of training for directors are to inform directors about the following:

- The overall purpose of the process.
  - the benefits to the local library,
  - the benefits to the state,
  - the ways in which the state will use performance measures data in allocation planning.
- The nature of the process of collecting and reporting data on performance measures.
- The use of performance measures in local library planning.
- The resources required to gather performance measures data.
- The ODL's immediate plans for implementing the process in the state.

An agenda for a training session for directors would be organized around these objectives. A suggested agenda is given in Figure 1.

This agenda is intended to be comprehensive, and full development of each topic would result in an impractically long training session. The agenda should be used as a structure from which items may be developed in less or greater detail as time permits.

b. Training participating library staff.

The objectives for training for staff involved in collecting data put more emphasis on skills acquisition. They are:

Figure 1
LIBRARY DIRECTORS' TRAINING AGENDA

Introduction to the performance measurement process:

- Historical review of movement from standards to planning.
- Comparison of the usefulness of traditional library statistics with that of performance measures.
- Brief overview of the process of using performance measures in planning.

Benefits to the local library:

- Experiences of test site library directors.
- Benefits of the process as a staff development tool.

Benefits to the state:

- Need at the state level for performance measures to supplement and enhance the more traditional standards.
- Need at the state level for better data for planning.

How the state will use performance measures data in allocation planning:

- Ways decisions are made now.
- Ways decisions will be made.

Review of the data collection process in the "Performance Measures for Libraries: A Manual for Oklahoma Public Libraries":

- Review of some or all of the measures.
  - categories of measures,
  - definitions of measures,
  - methods to calculate,
  - use of results.
- Review of the data elements.
  - overview of existing data elements,
  - explanation of developed data elements,
  - explanation of survey-derived data elements.
- Review of the checklists.
  - concept of checklists,
  - use of results by the ODL.
- Review of Table 2, Local Library Summary of Performance Measures, in Appendix A.

Introduction to the use of performance measures in local library planning.

Review of performance measures procedures, resources required for each, and assistance to be provided by the ODL.

Presentation of the schedule the ODL proposes, the resources the ODL intends to provide, and the immediate results to be expected.

- To enable staff to assemble already collected data for reporting.

- To enable staff to produce data elements requiring development by

  - applying sampling procedures
  - developing the required data

- To enable staff to administer and analyze surveys

  - to conduct a telephone survey
  - to conduct a user survey

- To inform staff about the use of performance measures in planning.

The overall training strategy for library staffs should include explanations of the purpose of the performance measurement process, demonstrations and practice with individual data elements, and ample opportunity for discussions and questions. The manual for local libraries can be used as a text for the training and will provide most of the content and sample materials.

General recommendations for training are as follows:

- Provide seating for participants at tables rather than in rows of chairs.

- Provide a copy of "Performance Measures for Libraries: A Manual for Oklahoma Public Libraries" to each participant--in advance.

- Duplicate copies of tabulation, survey, and reporting forms from the manual so that they can be discussed and filled in as training exercises.

- Prepare transparencies of the forms so that the trainers can demonstrate procedures.

- Where possible, create a simulation for each data collection procedure so that participants can practice and raise questions at the workshop.

- Have a librarian with experience in the process at the workshop to talk about benefits and to answer questions.

A training outline for staff is given in Figure 2.

Figure 2
TRAINING OUTLINE FOR LIBRARY STAFF

Introduction to the performance measurement process:

- Uses of performance measures at the local level.
- Uses of performance measures at the state level.

Review of specific performance measures being used.

Instruction on the data elements required:

- Review of data elements from existing data.
- Review of developed data elements.
  - simulation of sampling procedures,
  - walkthrough with data collection forms,
  - instruction in use of U.S. Census sources.
- Review of survey-derived data elements.
  - simulation of telephone survey procedures
    - -- drawing a sample
    - -- conducting an interview
    - -- training volunteers
    - -- tabulating results
  - simulation of user survey procedures
    - -- administering forms
    - -- tabulating results
- Review of resources required for collecting and reporting performance measures.
- Review of nature of support the ODL will provide.

Assisting Librarians in Data Collection

ODL can design a number of services to ease the burden of collecting data at the local library. For the initial statewide uses of the process, the most obvious form of assistance would be the direct participation of ODL staff in the local library's efforts. Because of the number of libraries involved, ODL staff will have to limit its direct involvement and design services to assist in data collection. Candidate services are these:

1. Providing libraries with a random sample from their communities for the telephone survey. (Since the manual process of drawing the telephone sample requires an hour to draw 25 phone numbers, the full process requires 10 hours of effort for each library. ODL may be able to employ a service to develop samples at much less per library cost/effort.)

2. Tabulating results for libraries of the telephone and user surveys. (The procedures for tabulating these surveys are found in "Performance Measures for Libraries: A Manual for Oklahoma Public Libraries" [the local library manual]. The efficiency of doing tabulation at the ODL is that staff need only be trained once rather than in each library.)

3. Printing copies of survey forms. (Each library needs to review the telephone survey form to verify that the list of services provided corresponds with the library's offerings. The ODL could then use in-house or hired word processing services to customize master copies of survey forms and could duplicate sufficient quantities, since local libraries may find survey form production a barrier to participation.)

4. Conducting telephone surveys via professional interviewing services or in-state WATS lines. (The reactions of field test libraries were divided regarding the telephone survey. All agreed that it was time-consuming, while some also said

it was the most useful part of the process and others said it was not worth the great effort. The ODL could provide this data gathering as a service to libraries, through either professional services or in-house staff, although in that case libraries would lose the direct contact with their community that the survey provides.)

5. Selecting sample days for data gathering. (Developed data elements and the materials availability survey require the identification of sample periods of time within which data are to be gathered. The ODL could identify sample days to be used throughout the state to fit with the ODL training and data reporting schedule.)

6. Training interviewers. (Most libraries conducting a telephone survey will need to have staff or volunteers trained in surveying procedures and in the use of the provided telephone survey form. The ODL could use the "Telephone Survey Procedures" of the local library manual as a guide for training staff and volunteers.

Assisting Librarians in Interpretation of Performance Measure Data

This section is primarily intended to provide suggestions to the ODL consultants for working with local public librarians to help them understand their library's performance measure data. In addition, two other groups will be considering the data: the ODL consultants themselves and library boards or trustees. The ODL consultants will analyze the data before meeting with local librarians. Local librarians will wish to share analysis with their boards. Therefore, these two constituencies will be included in the following section as well.

For all review and analysis steps, a few overall understandings about the intent of the measurement process and the nature of the results must be kept in mind. These points are all made in the manual for local libraries, but should be reviewed for all parties participating in data analysis sessions.

1. There are no right or wrong scores for any of the measures. After collecting scores from the same performance measures throughout the state for a number of years (three to five), reliable information will be available about the ranges of scores for libraries serving similar communities. This will give libraries some idea of where they stand compared to others.

2. Performance measure scores may be looked at in two ways:

   a. Horizontally--i.e., compared to other libraries in the state serving communities of similar size and characteristics.

   b. Vertically—i.e., looking for trends over time within each library or library system.

3. No one performance measure should be regarded as definitive in determining a good library. Concentrating on only one measure may skew perceptions of library services and eventually the services themselves, leading to a less effective rather than a more effective library.

4. Scores on performance measures should be evaluated by criteria that reflect local and state libraries' goals and objectives. For example, ODL may decide that since public libraries are funded to serve all the people and that since people cannot use services they do not know about, community penetration scores of less than a certain percentage (determined in part by looking at ranges of scores statewide) need to be raised.

5. The checklists have no scores, and results are not designed to be aggregated. They are designed to provide both ODL and the local libraries with an occasion to review aspects of their operation including, in some cases, important policy issues.

Organizing Performance Measure Data for Review

1. A Local Library Summary of Performance Measures[1] form should be completed for each library. This pulls together all the data for each library. Completeness of the data can be checked at this time. If data elements are missing for some measures, they should be obtained. If it seems impossible to obtain a missing data element, the reasons for its unavailability should be noted on the sheet. This reporting will aid in the overall evaluation of the measures at the end of the data-gathering period.

2. A summary table should be prepared that will show scores on all the measures from all the libraries. It should include the population served by each library as well as its performance measure scores. The libraries can be identified by number or letter. The format shown in Figure 3 is suggested for the composite summary.

Review and Verification of Performance Measure Data

The performance measure scores should be thoughtfully examined to check their accuracy. Using the "Local Library Summary of Performance Measures," spot checks should be done to ensure that calculations have been set up accurately (the right number on the top, etc.) and performed accurately. Tabulation sheets for survey results should also be spot-checked.

The "Composite Summary Table" (Figure 3) should be examined for the occurrence of major variations in scores. Too little information is now available to determine expected ranges for each score, but scores that seem unusually high or unusually low should be checked both for accuracy of calculation and for reasonableness of data element figures. Check-back calls to participating libraries may be indicated if data element figures seem unusual.

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[1] "Performance Measures for Libraries: A Manual for Oklahoma Public Libraries," Chapter 6, pp. 72-76.

Figure 3

COMPOSITE SUMMARY TABLE

Population Category: _____						
	Library Name	Report Received(X)	Performance Measure 1 (name)	Performance Measure 2 (name)	...	Performance Measure n (name)
Library A						
Library B						
Library C						
Library D						
.						
.						
.						
.						
Library X						
Total (a)						
Number Reporting (b)						
Mean $\frac{(a)}{(b)}$						
Lowest Score						
Highest Score						

Interpretation of Performance Measure Data

As was indicated previously in this section, the two major frameworks for interpreting the performance measure data are comparisons with similar libraries and comparisons over time within a single library. At the beginning stages of the implementation process, data needed to provide both frameworks are not available. They will accumulate, however, as the ODL moves to institute the use of performance measures for all public libraries statewide.

It is especially necessary to analyze the performance measures after the first statewide collection of data. If performance measures are to become an integral part of ODL's planning and operations, and are to serve as a basis for the distribution of state and federal funds, then an on-going evaluation of the performance measures and the process for collecting the data is essential. The analysis must consider the data in terms of their usefulness to the three groups who will be most involved in acting on them - the ODL staff, the library administrators, and the library boards. This can be done by addressing with each group a series of questions, including (but not limited to) the following. (The questions focus first on the process, then on the results. These discussions should be recorded so that summary documents can be prepared.)

The process:

- Are there surprises (i.e., gaps between our expectations and the reality) for you regarding the performance measures process?
- Did it take more or less time and effort than you had planned?
- Did you feel adequately prepared/trained for your role in this project?
- What part of the process was the most rewarding for you?
- What part of the process was the most frustrating for you? Why? What could be done differently another time to remedy this?

The product:

- Are there surprises for you in the data? Where? Why?
- Do you think the performance measures measure what is important about your library? If not, why not?
- What are the three most useful performance measure scores for you?
- How will you use them? What changes will you make? What resources will you need to make these changes?
- Do you believe the information available as a result of obtaining these measures was worth the effort involved in the process? Why or why not?

From minutes of such discussions, a summary can be prepared for each library, which will include the following:

1. A copy of their "Local Library Summary of Performance Measures."
2. A copy of the "Composite Summary Table" with their results circled in red or otherwise identified. Library names should be removed.
3. A summary of the discussion of the suggested questions, accentuating the positive, i.e., reviewing the performance measures found most useful and how they would be used.[2] Suggestions about the availability of resources to implement the changes should be made. These may include bibliographic materials, grant sources, or workshops.

[2]See next section, "Assisting Librarians in Using Performance Measures in Planning," for a fuller development of followthrough.

In addition to the debriefing discussion outlined above, the ODL consultants should review with each participating librarian their library's score on each measure and discuss ways to change a score if it seems desirable. Administrative actions that can produce score changes are discussed in the manual for local libraries. The appropriateness of one or more of the suggested methods can be worked out in such a discussion. Selection of method can be based on local library resources, particular capabilities and concerns of local library staff, and ODL consultant knowledge of libraries' experiences.

During this review, relationships among the performance measures should be pointed out. For example, a decision to try to increase turnover rate may result in a decision to weed many unused or out-of-date materials from a collection. If there is no expectation of an increased materials budget, one result of this action will probably be fewer materials. The experience of many libraries has been that even with fewer materials, circulation will increase following a careful weeding process. This means that probably circulation per capita also will rise as a result of this action. Materials held per capita, however, will go down. The ODL consultants can work with local librarians to help them understand the probable implications of whatever strategies for change may be selected. As libraries gain experience in working with the measures, ramifications of certain strategies may become apparent that were not anticipated. By staying abreast of such results and sharing them when appropriate, ODL consultants can help participating libraries learn from one another.

The reason for this kind of data interpretation process, especially after the first year, is that no meaningful answers are yet available to the question "How do we compare with other libraries?" In some sense, this is not the most important question even when such data become available. The most important question for ODL is what the cumulative data mean for the state as a reflection of its priorities, goals, and objectives: As a state, are we doing what we believe we should be doing? If not, where and how shall we change? The question for local libraries is a similar one. The vision of what the libraries should be doing, together and individually, will not come from the performance measure data. The data will measure what is being done and can document change over time. Even as a map will tell you how far a chosen destination is from where you are now and how close you are to getting there as you travel, but will

not tell you where you should go, performance measures will measure where a library is and how it is moving, but not where it should go.

Checklist Data: Organization and Use

Checklists (see local library manual) are not designed to be cumulated or scored. It may be useful, however, for ODL to keep a record of the percentage of reporting libraries indicating the presence or practice of the various items on the checklists. Such a record could be set up as follows:

1. For each checklist, use a blank copy of the form to tabulate the number of libraries that check each item.

2. Sort the checklists into piles--all Administrative Checklists in one, all I & R Checklists in one.

3. Using the unmarked form to record, simply count the number of positive responses (checked items) to each question or item (~~1111~~ 1, etc.).

4. Repeat for all checklists.

5. Divide the number of positive responses by the total number of libraries returning the checklist to obtain the percentage. Example. Ten libraries returned the Administrative Checklist. Four indicated they had personnel policies. 4 ÷ 10 equals .40, or 40% of those reporting have personnel policies.

For ODL, the primary use of such data is to look for areas of low percentages and offer whatever resources seem appropriate to encourage development. For example, if it is learned that very few libraries use more than one review source in book selection, a workshop might be offered introducing the seldom-used review sources. Or ODL might decide to fund subscriptions and selection tools for libraries which cannot afford them. If few libraries have

community resource files, a packet showing how to create, use, maintain, and publicize such a file might be developed and made available by ODL to local libraries.

ODL can also use materials sent in with the checklists (such as written role/mission statements, book selection policy or annual reports) to create packets of sample materials for use by libraries lacking such materials. For examples of such packets, see the Systems and Procedures Exchange Center (SPEC) Kits published by the Association of Research Libraries.

The efficacy of the resources and methods used to encourage development in selected areas can be monitored in part by comparing the checklist results annually. Are more selection sources being used now than before the workshop? Do more libraries report the existence of community resource files a year after the packets have been made available?

Assisting Librarians in Using Performance Measures in Planning

The collection and analysis of data are not especially useful as ends in themselves. These procedures become useful as they are incorporated into library planning. In planning, performance measure data are useful in evaluating existing library services and resources and as a basis for developing goals and objectives. To obtain maximum benefit from the performance measure data collection process, ODL consultants may wish to assist local librarians in using the data as they plan for their libraries.

Rather than spell out all the steps and procedures in local library planning, this section will proceed on the assumption that the ODL consultants will have become familiar with A Planning Process for Public Libraries[3] and will use it with local libraries as a guide for planning. The major steps in this planning process include the following:

1. Assessment of community and library environment
2. Evaluation of current library services and resources
3. Development of a role statement for the public library in its community

[3]Vernon E. Palmour, Marcia C. Bellassai, and Nancy V. DeWath, A Planning Process for Public Libraries (Chicago: American Library Association, 1980).

4. Determination of goals, objectives, and priorities
5. Development and evaluation of strategies for change
6. Implementation of strategies
7. Monitoring and evaluating progress toward goals
8. Reviewing and updating goals, objectives, and priorities at specified periods during the period covered by the plan.

Performance measures provide needed information for three of these planning steps: (2) evaluation of current library services and resources, (4) determination of goals, objectives, and priorities, and (7) monitoring and evaluating progress toward goals. The ODL can assist local libraries in examining performance measure results to assess the current levels of library services and resources, in framing goals and objectives to improve scores where they are inadequate, and in instituting ongoing performance measurement procedures for the areas most requiring attention.

As a result of the implementation of the ODL statewide data-gathering program, public libraries will already have identified many of the performance measure scores most useful for evaluating their own services and resources. Within a few years, they will also have information concerning trends in their own scores over time and how their scores compare with those of other libraries serving communities with populations of a similar size and comparable characteristics. At this stage (Step 2) of the planning process, it is useful to review this information, looking for areas of strength and weakness in library operations. Library systems may wish to further analyze performance by displaying branch library scores on a designated set of performance measures to show variations within the system.

The available performance measure data should be considered in three phases:[4]

1. Summarize performance measure scores and review trends in the library (system) over time.

[4] A Planning Process for Public Libraries, p. 105.

2. Compare branch resources and performance.
3. Compare library performance measure scores with those in libraries serving communities of similar size and comparable characteristics throughout the state, when such data become available.

The performance measure data may be summarized by using graphs, when appropriate, to contribute to the planning committee's comprehension.

Performance measure scores can contribute to the development of goals and objectives by providing baseline data for measurement. In coming years, libraries may wish to use the range of scores within their population category as a guide for setting realistic objectives for the planning period.

As an example, assume that a library planning committee knows that its community awareness score (based on the telephone survey) has been 31% for the last four years. It is also known that libraries serving similar-sized communities in Oklahoma have scores as high as 72%, but that the state median score is 54%. The committee could decide that establishing an objective of increasing their community awareness score to 45% by the end of a three-to-five-year period is realistic.

Monitoring and evaluating progress toward goals is accomplished by regularly obtaining appropriate information about whether objectives are being met within the specified period. If the library mentioned as an example has decided to increase its community penetration (goal) by specifically working to raise its community awareness rate to 45% at the end of the five-year planning cycle (objective), the strategies to effect this change need to be implemented throughout the planning period, not just during the fifth year. After public relations campaigns are conducted annually for two years, a phone survey may be done. If results indicate an increase in the community awareness rate from 31% to 39%, library management can assume that the strategies adopted were effective. If there is no change in the rate, however, tactics should be changed while there is still time to improve the rate before the end of the planning period. Continuous measurement and evaluation during the course of the planning period is essential if the process is to be effective.

Libraries with few staff members will probably want to have fewer goals and objectives than those with more staff, partially because effecting change requires staff attention and time, which are usually in short supply. A library director should either assume responsibility for monitoring progress toward goals (i.e., the accomplishment of objectives) or specifically delegate it to one or more staff members.

The product of monitoring is information to be used in the next planning cycle of selecting performance measures and establishing objectives. Depending on the ability of the library to accomplish a specific objective successfully, that information must be used as a basis for stating objectives during the next planning cycle. Each planning cycle can be a one-year or a two-year cycle. However, at the end of each cycle, the library must determine whether it has actually accomplished the objectives previously stated. Optimally, the library will want to (1) identify the factors that contributed to objective accomplishment and attempt to strengthen them and (2) identify the factors that limited its ability to accomplish objectives and attempt to reduce or eliminate them. On the basis of an analysis of the factors related to the last cycle of objectives, revised objectives are then set for the next planning cycle.

ODL can be of help to local libraries by doing the following:

- Providing access to A Planning Process for Public Libraries.
- Provide training opportunities on the planning process, i.e., publications, workshops, consultant visits, telephone consultation, etc.
- Working with librarians to establish their planning process schedule.
- Meeting with the planning committees as requested.
- Providing resources for particular areas of planning.
- Interpreting the statewide aggregations of data to the planning committee.

APPENDIX A

COMPILING AND REPORTING LOCAL LIBRARY DATA

One way a local library can use local data is to compare the results of the data with those from comparable libraries in the state. This comparison is made possible when the state library collects data from the local libraries, compiles it into a form usable by the local libraries, and distributes those reports to local libraries. The reports can be composed of data matrices, data graphs, and narrative reports.

Preparing Data Matrices

Data matrices are table displays of library data that allow the examination of performance measures for libraries from communities of a similar size. Figure A.2 is an example for communities with populations under 2,000. Six performance measures, developed from existing data, are reported in terms of the number of libraries serving that population size, the number of libraries for which data are missing, the range of scores on the performance measures, and the mean score. Similar matrices would be developed for each population category.

The matrices can be prepared by ODL as follows:

1. ODL determines on which performance measures data are to be collected.
2. ODL sends reporting forms, such as that in Chapter 6 of the local library manual, to local libraries (a step analogous to the present process of acquiring annual reports).
3. ODL receives reports from the local libraries.
4. ODL prepares a tabulation form (Figure A.1) for each population category. Down the left-hand side, the libraries to be reporting (this will be known in advance) are listed, first with a code letter and then by library name. The next column allows an X to be made when the report is

received from the library. Libraries not reporting should be followed up to determine how the ODL can increase the number of libraries reporting. The performance measures heading the columns to the right should be in the order in which they appear on the reporting form so that they are easily transferred to the tabulation form.

5. As the forms are received from local libraries, they are sorted by population category. The forms within a category are arranged in the order in which they are listed on the tabulation form.
6. Within a population category, performance measure scores for an individual library are recorded on the "Composite Summary Table" (Figure A.1) on the row for that library.
7. When the deadline for reporting has been reached, scores from libraries reporting can be summarized.
8. Add each column of performance measures and record the sum in the total row.
9. Count the number of scores added to produce the total and record that count in the number reporting row.
10. Divide the total by the number reporting to produce the mean. Round the result to two decimal places and record the answer in the appropriate row.
11. Examine the column of scores to determine the lowest score and record it in the lowest score row.
12. Examine the column of scores to determine the highest score and record it in the highest score row.
13. Construct a form similar to Figure A.2 on p. A-5 listing the names of the performance measures being reported in the left-hand column. Data from Figure A.1 can be transferred to Figure A.2 to provide a summary matrix.
14. On Figure A.2, list the number of libraries in the population category, whether reporting or not, in the column headed N.
15. For each performance measure, subtract the number reporting (Figure A.1) from the N (Figure A.2) to determine the number for whom data are missing and report it in the next column in Figure A.2.

Population Category: _____						
	Library Name	Report Received (X)	Performance Measure 1 (name)	Performance Measure 2 (name)	...	Performanc Measure n (name)
Library A						
Library B						
Library C						
Library D						
.						
.						
.						
.						
Library N						
Total (a)						
Number Reporting (b)						
Mean $\frac{(a)}{(b)}$						
Lowest Score						
Highest Score						

Figure A.1. Composite Summary Table

Performance Measure	N	Missing	Range	Mean	Your Score
Circulation/ Population	49	26	0.42 - 7.58	3.47	
Population/ Staff	49	19	367 - 11,190	3,468	
# Volumes/ Population	49	19	0.77 - 12.86	5.56	
Circulation/ # Volumes	49	27	0.05 - 2.74	0.75	
Circulation/ Staff	49	29	600 - 30,690	12,404	
Per Capita Support	49	20	0.00 - 7.64	1.98	

NOTE: Data source is Annual Report and Directory of Oklahoma Libraries, July 1, 1977 - June 30, 1978.

Figure A.2 Matrix of Performance Measures from Existing Data (Population Category: Under 2,000)

16. In Figure A.2 in the Range column, list the lowest score from Figure A.1, a dash, and the highest score from Figure A.1.
17. List the mean in that column of Figure A.2.
18. When sending these matrices to reporting libraries, an additional column can be added to the right, headed Your Score, in which the scores from the reporting library are entered.

Preparing Data Graphs

Data graphs supplement the data matrices by showing the distribution of the scores. Data matrices show only the highest and lowest scores and the mean score. Whereas the matrices focus on the amount of discrepancy in performance that can be found, the graphs allow judgments about the relative number of libraries that fall below or exceed a level of performance.

Graphs can be prepared by ODL by the following procedure:

1. Work from the Composite Summary Table prepared for the data matrices which is separated by size of community served.
2. A decision needs to be made for each performance measure on the scale to be placed at the bottom of each graph. The standard convention would be that for data representing 15 to 50 cases (libraries), the graph should have from 5 to 7 cells or divisions.[1] In the examples in Figure A.3, the cells were established with this guide in mind and also through examination of the data. For simplicity, where possible, whole numbers were used to designate cells.
3. Using preprinted 1/4-inch graph paper, place the values for the cell designators along the horizontal axis from left to right.
4. List numbers to indicate frequency (i.e., the number of libraries in each cell) vertically on the left-hand side.

[1] Norbert Lloyd Enrick, Effective Graphic Communication (Princeton: Auerbach, 1972).

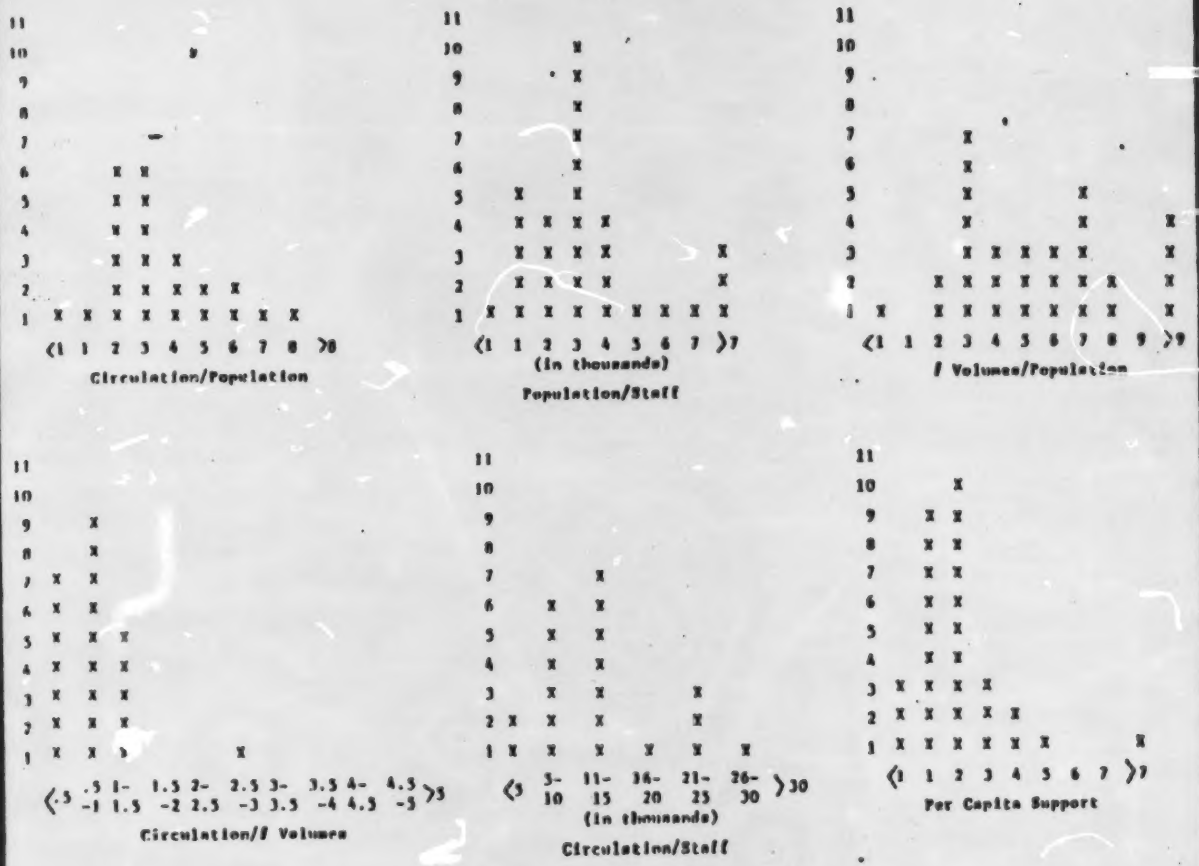


Figure A.3. Graphs of Performance Measures from Existing Data

(Population Category: Under 2,000)

5. Taking a specific performance measure on the Composite Summary Table, make an X on the graph paper for each library's score, using the following procedure. Take the score for the first library on the form. Find the cell into which that score fits and make an X in the first row (the row labeled "1"). A second score in that cell would have an X in the second row, and so forth. If the cells are designated with whole numbers, then their range extends 0.5 on either side. For example, a cell designated as 2 would contain a score from 1.50 to 2.49. A score of 1.87 would be counted in this cell.
6. When a graph is completed for a performance measure with a population category, count the Xs on the graph to check that their number is the same as the number of reported scores.
7. The hand-drawn graph can be used as a draft for typing graphs, as in Figure A.3.
8. When sending these graphs to reporting libraries, an individual library's scores can be placed in context by circling Xs in the appropriate cells to represent that library's scores.

Preparing Narrative Reports

The narrative report is a third means of summarizing scores on performance measures. It has the advantage of providing an opportunity for the ODL to comment on the meaning of the scores in terms of statewide needs for library service. Such a report could be used in budget presentations, planning studies, or public relations activities. Narrative reports should be relatively brief, since, for each performance measure, six separate reports will need to be prepared--one for each population category.

The basis for preparing each report will be the data matrix and graph relating to an individual performance measure within a population category. As an example, the performance measure of circulation per capita for libraries in communities under 2,000 will be referred to. The elements to consider including in a narrative are these:

1. A conceptual introduction to the measure. A brief discussion of the concept behind the measure will make interpretation of the scores easier for the reader.
2. The number of libraries reporting and not reporting. In this case, 23 libraries reported data and 26 did not.
3. The range. On this measure, the range was 0.42 - 7.58 items circulated per capita.
4. The mean. Here the mean was 3.47 items circulated per capita.
5. The mode. The mode is the most frequent score. In this case there were two modes, 2 and 3, although often there will be a single most frequent score.
6. The median. The median is the middle score in an ordered distribution; that is, half of the scores will fall above the median and half below. One way to determine the median score would be to arrange the performance measures scores in order, from lowest to highest, and count to the middle score. For our purposes, an easier approximation of the median is obtained by counting Xs on the graph, beginning at the left-hand end. We know on this measure that there are 23 scores; therefore, the twelfth score will be the median score. By counting Xs from the left, we determine that the twelfth X falls into the 3.0 cell. If there are an even number of scores and the middle scores fall into different cells, the median will be the average of the two middle scores.

An example of a discussion for circulation per capita in libraries serving communities of less than 2,000 residents follows: Circulation per capita is the number of items circulated by a library annually divided by the population served by that library. If everyone in the community were equally served by the library, they would all have taken out the number of items shown. The measure is an indication of the extent to which a library's services have penetrated its community, assuming that circulation is a valid and desirable measure of service. For the 49 libraries serving communities of less than 2,000 residents, 23 reported data on measures of annual circulation and on population. Results ranged from less than 1 item circulated per capita (one

library) to more than 7 items. The mean score on this measure was 3.47. Of the 23 libraries reporting, 12 had scores of between 1.5 and 3.49. The median score was 3. By inspection, it can be seen that there was a greater spread of scores above the median than below; 6 of the libraries had scores only 1 point below the median.

Interpreting Local Data for State-Level Use

The matrices, graphs, and reports produced through the above procedures will provide the basis for state-level interpretations and decisions about levels of adequacy. At this time, an objective definition of adequacy, for library services, does not exist. Adequacy has been a professional judgment made by leaders in the profession, and the level judged as adequate has increased over the years as support for libraries has improved. Thus, the ODL will need to make ongoing judgments about the performance of libraries in Oklahoma and make fresh observations of adequacy for each planning period.

For the first years of this process, the information provided by the data will be limited, for comparable data for Oklahoma or from other states are lacking. Judgments will have to be made from single snapshots with no "before" or "after" pictures for comparison. Nevertheless, examination of a single year's data raises valuable questions. To take the data in Figures A.2 and A.3 for examples, the following questions are suggested by the data for libraries from communities of less than 2,000:

1. If four libraries can circulate six or more items per capita, why do eight circulate less than three?

Similar questions can be asked for each measure, particularly for ones with a large range. The high-scoring libraries can be studies for techniques to transfer to lower-scoring libraries.

2. What is the quality of the collections with high numbers of items per capita? Is the overall low turnover rate a product of unweeded collections?

Examination of the tabulation forms will show if those libraries with high numbers of items per capita are those with low turnover rates. Visits to libraries will be required to evaluate collections.

3. How does one measure relate to another?

To assess the relationships of two measures, the data from the tabulation form can be used to construct a simple table. The following work form may be used.

Performance Measure b:

_____

Median _____

Performance Measure a:		Low	High
_____	Low		
Median _____			
	High		

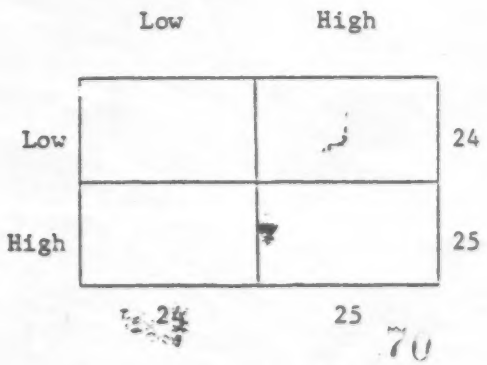
For example, if the relationship of community awareness of library services and circulation per capita were of interest, we would enter the name of one of those variables in the blank at Performance Measure a and the other at Performance Measure b. The median, which can be determined from the graphs for these measures, should be entered in the blank under the performance measure name.

The object of this procedure is to place a mark (√) on the table for each library having scores on both measures. To determine where the mark for each library is to be placed, refer to the two columns on the tabulation

form showing the performance measures of interest. Beginning with the first library on the form, determine for each measure: Is it above or below the median? (The median is a cutting point, not a range. If the median is 3.0, then 3.01 is above the median.)

- If both scores are below the median, the mark goes in the low-low box at the upper left.
- If both scores are above the median, the mark goes in the high-high box at the lower right.
- If the measure at the top is above the median and the measure at the left is below, the mark goes in the upper right box.
- If the measure at the top is below the median and the measure at the left is above, the mark goes in the lower right box.

You may have one score that is exactly on the median for each measure; those pairs of scores can be disregarded in this analysis. You should have the same number of marks in the table as libraries for which you have both scores, less any discarded for being on the median. A second check on the procedure is approximately half of the marks should be in the top half of the table and half on the bottom; likewise, half should be on the right side and half on the left. For example, if data for 49 libraries were tabulated, they should be distributed approximately as shown below:



If there were no relationship between the two measures tabulated, the counting marks in the table cells would be:

	Low	High	
Low	12	12	24
High	12	13	25
	24	25	

If there were a very strong relationship between the two measures, two patterns could result. Using our example, if high community awareness of library services always related with high circulation per capita, then the marks would be distributed like this:

24		24
	25	25
24	25	

If, on the contrary, high community awareness of library services always related with low circulation per capita, the marks would be distributed like this:

	24	24
25		25
25	24	

Inspection of the results of tabulating will indicate the degree to which measures operate together.

The overall process of interpretation and use of data is still based largely on professional judgment with the addition of data that focus on performance. The utility of these data will increase as data are cumulated and as staff gain experience with them.

Some performance measures will be more responsive to applications of state aid than others. The ODL should document the amount of state aid spent for improvement of specific performance measures so that historical analysis, after a period of years of experience, will suggest which measures can more cost-effectively be improved.

The ODL will be able after a few years to examine the movement of distributions of scores to make observations such as this one:

- The mean score on items per capita for libraries in communities of over 25,000 has improved from _____ in 1981 to _____ ___ in 198_.

- In 1981, ____% of libraries serving communities of 2,000 to 4,999 had less than $_____ per capita support. In 198_, only ____% fell below $_____.

72